

Serial No. 10/776,105

-2-

Docket No. 1232-5281

Supplemental Reply to Office Action dated December 8, 2005

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A stereoscopic image display apparatus for displaying different parallax images on a viewing region, comprising:

a display device displaying the parallax images by different pixels;
a horizontal separating member including a plurality of partial separating regions which extend in a horizontal direction and are arranged along a vertical direction, each partial separating region including a plurality of state-selective regions which are arranged along the horizontal direction, each state-selective region selectively transmitting an incident light according to a state of the incident light; and

a vertical separating member projecting light from the predetermined pixel of the display device onto the predetermined position of the horizontal separating member in the vertical direction,

wherein the parallax images displayed on the display device are displayed at different positions of the viewing region by the horizontal separating member and the vertical separating member.

2-3. (canceled)

4. (previously presented) The stereoscopic image display apparatus according to claim 1,

Serial No. 10/776,105

-3-

Docket No. 1232-5281

Supplemental Reply to Office Action dated December 8, 2005

wherein a projection magnification of the vertical separating member in the vertical direction onto the horizontal separating member with respect to the display device is larger than 1.

5. (previously presented) The stereoscopic image display apparatus according to claim 1, wherein, in a case where a first and a second state-selective regions arranged in the different partial separating regions selectively transmit light with different states, respectively, the first and the second state-selective regions do not correspond with each other in the vertical direction.

6. (previously presented) The stereoscopic image display apparatus according to claim 1, wherein the state of the incident light is a polarization state.

7. (withdrawn) The stereoscopic image display apparatus according to claim 1, wherein the plurality of state selective regions have properties of selectively transmitting light with different wavelength regions.

8. (withdrawn) The stereoscopic image display apparatus according to claim 1, wherein the plurality of state selective regions have properties of selectively transmitting light with different polarization states and wavelength regions.

9. (previously presented) The stereoscopic image display apparatus according to claim 1, wherein the vertical separating member is a cylindrical lens array including a plurality of cylindrical lenses whose generatrix are horizontal and are arranged along the vertical direction,

Serial No. 10/776,105

-4-

Docket No. 1232-5281

Supplemental Reply to Office Action dated December 8, 2005

or a mask having a plurality of slit apertures which are oblong in the horizontal direction and are arranged repeatedly in the vertical direction.

10. (previously presented) The stereoscopic image display apparatus according to claim 1, wherein a first pixel of the display device displays a first parallax image of the parallax images, and a pixel adjacent to the first pixel in the vertical direction or the horizontal direction displays the parallax image different from the first parallax image.

11. (previously presented) The stereoscopic image display apparatus according to claim 1, wherein a first pixel of the display device displays a first parallax image of the parallax images, and a pixel adjacent to the first pixel in the vertical direction, the horizontal direction or oblique direction displays the parallax image different from the first parallax image.

12. (previously presented) A stereoscopic image display apparatus for displaying different parallax image on a viewing region, comprising:

a display device displaying the parallax images by different pixels; and
a horizontal separating member including a plurality of partial separating regions which extend in a horizontal direction and are arranged along a vertical direction, each partial separating region including a plurality of state-selective regions arranged along a horizontal direction,

Serial No. 10/776,105

-5-

Docket No. 1232-5281

Supplemental Reply to Office Action dated December 8, 2005

wherein each state-selective region selectively transmits light having a part of visible wavelengths; and

wherein the parallax images displayed on the display device are displayed at different positions of the viewing region by the horizontal separating member.